

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
18 December 2003 (18.12.2003)

PCT

(10) International Publication Number  
WO 03/104057 A1

(51) International Patent Classification<sup>7</sup>: B60T 8/00, 8/32

(21) International Application Number: PCT/GB03/02506

(22) International Filing Date: 10 June 2003 (10.06.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0213372.6 11 June 2002 (11.06.2002) GB

(71) Applicant (for all designated States except US): AIRBUS  
UK LIMITED [GB/GB]; New Filton House, Filton, Bris-  
tol BS99 7AR (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): DARKE, Jason,  
William [GB/GB]; 2 Melville Terrace, Bedminster, Bristol  
BS3 1EU (GB).

(74) Agents: PEARSON, James, Ginn et al.; Abel & Imray,  
20 Red Lion Street, London WC1R 4PQ (GB).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,

LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD,  
SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US,  
UZ, VC, VN, YU, ZA, ZM, ZW.

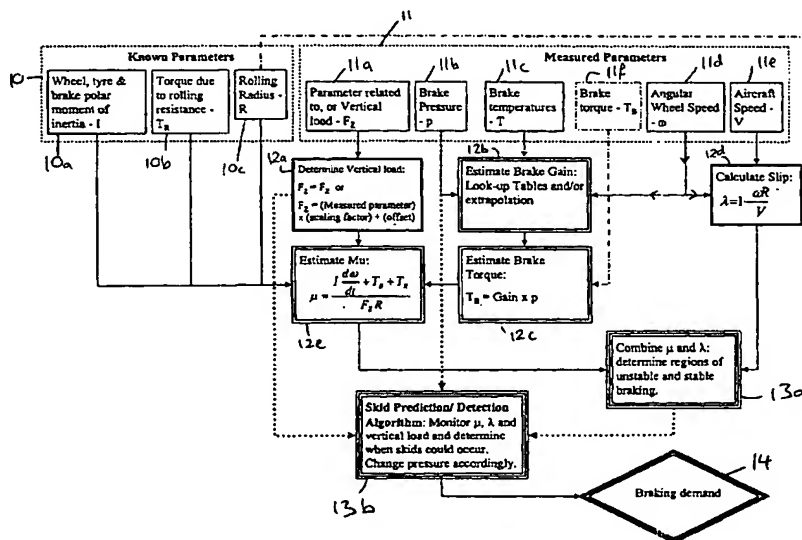
(84) Designated States (regional): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,  
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Declaration under Rule 4.17:

— as to applicant's entitlement to apply for and be granted  
a patent (Rule 4.17(ii)) for the following designations AE,  
AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,  
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,  
KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,  
MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU,  
SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG,  
UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian  
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European

[Continued on next page]

(54) Title: AIRCRAFT BRAKING METHOD AND APPARATUS



(57) Abstract: An aircraft is decelerated by applying a braking force to a wheel of the aircraft as it moves along the ground. An anti skid controller calculates the braking force to be applied by taking into account data (boxes 11a, 12a) relating to the vertical load transmitted between the ground and the wheel and data (boxes 11d, 11e and 12d) relating to the slip between the ground and the wheel. Predictions (box 13b) made regarding how the vertical load will change and data (box 13a) concerning the relationship between slip and the ground to wheel friction coefficient are both taken into account when calculating (boxes 13b, 14) the braking force to be applied. Skids may thereby be predicted in advance and may be reduced or even avoided.